

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1 and 7-17 have been amended. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 1 and 7-17 have been amended simply to delete the reference numbers from the recited claims. Applicant submits that this amendment is therefore not a narrowing amendment.

In the Office Action, claim 7 was objected to due to a minor informality. By this Amendment, Applicant has amended claim 7 to correct the minor informality noted in the objection. Accordingly, Applicant requests that the objection to claim 7 be withdrawn.

Claims 1-17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Iwase (U.S. Patent No. 6,255,008). Claim 1 recites that a fuel cell vehicle comprises a fuel cell power system (100) which generates power using hydrogen and oxygen, a motor (9) for a vehicle drive which runs by receiving the power supplied from the fuel cell power system (100), and a controller (10) functioning to compute an electrical load demand required for running the vehicle, operate the fuel cell power system (100) under a constant load regardless of the electrical load demand, when the electrical load demand is smaller than a predetermined load, and operate the fuel cell power system (100) under a load according to the electrical load demand, when the electrical load demand is larger than the predetermined load.

Iwase discloses that a control unit 20 calculates a power to be supplied via an inverter 44 (required output of the inverter, i.e., the load demand) on the basis of a detected accelerator pedal depression and determines a power to be generated by a fuel cell 36 (as an expected power) (col. 6, lines 9-15). If the difference in the required output and the expected power is greater than zero (col. 6, lines 26-31), then an amount of state of charge (SOC) of a battery 40 is detected (col. 6, lines 43-48), and the battery 40 is caused to output a power corresponding to the difference between the required output of the inverter 44 and the

expected output power of the fuel cell (col. 7, lines 38-41). In other words, the battery 40 is used to make up for a deficiency in the fuel cell 36 in providing the required output of the inverter 44.

If the difference in the required output and the expected power is less than zero (col. 6, lines 31-32), then the control unit 20 determines if the SOC of the battery 40 is less than 100% (col. 7, lines 48-66). If the SOC is 100%, then no power is outputted from the battery 40 and no power is stored in the battery 40 (col. 8, lines 5-10). If the SOC is less than 100%, then the an amount of power corresponding to the absolute value of the difference between the required output of the inverter 44 and the expected output of the fuel cell 36 is stored into the battery 40 (col. 9, lines 13-17). In other words, the excess expected power of the fuel cell 36 (i.e., the amount exceeding the required output of the inverter 44) is used to increase the amount of charge stored in the battery 44.

Finally, Iwase discloses that if the difference in the required output and the expected power is zero, then the control unit determines if the SOC of the battery 40 is equal to or lower than 60% (col. 9, lines 32-39). If it is not greater than 60%, it is considered that the battery 40 is not sufficiently charged (col. 9, lines 39-41), and a portion of the power extracted from the fuel cell 36 is stored into the battery (col. 10, lines 25-34). If the SOC is greater than 60%, then the DC/DC converter 38 is bypassed so that substantially the entire power extracted from the fuel cell 36 can be supplied to the inverter 44 without any substantial power loss (col. 10, lines 57-60).

In contrast to claim 1, Iwase fails to disclose or suggest operating the fuel cell power system under a constant load regardless of the electrical load demand when the electrical load demand is smaller than a predetermined load, and operating the fuel cell power system under a load according to the electrical load demand when the electrical load demand is larger than the predetermined load. Rather, Iwase merely discloses comparing the required output of the inverter 44 to the expected output power of the fuel cell 36 to determine if charge from the battery 40 is needed. In other words, Iwase does not compare the required output to a predetermined load to determine whether to operate the fuel cell under a constant load or a load according to the electrical load demand.

Furthermore, in the rejection, it is asserted that the predetermined load (or value) is the 60% SOC. As discussed above, the SOC is the state of charge of the battery 40, and the 60% value is used to determine whether the battery 40 is sufficiently charged or not. However, Iwase clearly fails to disclose or suggest comparing the required output (i.e., the electrical load) to the 60% value, and does not use the 60% value to determine whether to operate the fuel cell under a constant load or a load according to the electrical load demand. Accordingly, for all of these reasons, claim 1 is patentably distinguishable from Iwase.

Claims 2-15 are also patentably distinguishable from Iwase by virtue of their dependency from claim 1, as well as their additional recitations. Claims 16 and 17 are patentably distinguishable from Iwase for reasons analogous to claim 1, as discussed above.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 10/14/04

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